

LAYOUT 4/27/07 ^(KW) INSP 4 _____
 INSP 2 5/1/07 ^(KW) INSP 5 _____
 INSP 3 6/18/07 INSP 6 _____

ISSUE DATE: 04/16/07 P 526643

APPROVAL DATE: 6/18/07 *Logged Into Permit Manager* A 523837

TAX ID #
ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

Fogles Septic Clean, Inc. IS PERMITTED TO INSTALL ALTER

ADDRESS: 580 Obrecht Road PHONE NUMBER: 410-795-5670

SUBDIVISION: Woodridge LOT NUMBER: 10

ADDRESS: 13500 Highland Road PROPERTY OWNER: Peter Bonnett

SEPTIC TANK CAPACITY (GALLONS): 1250 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): 1250 COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 130

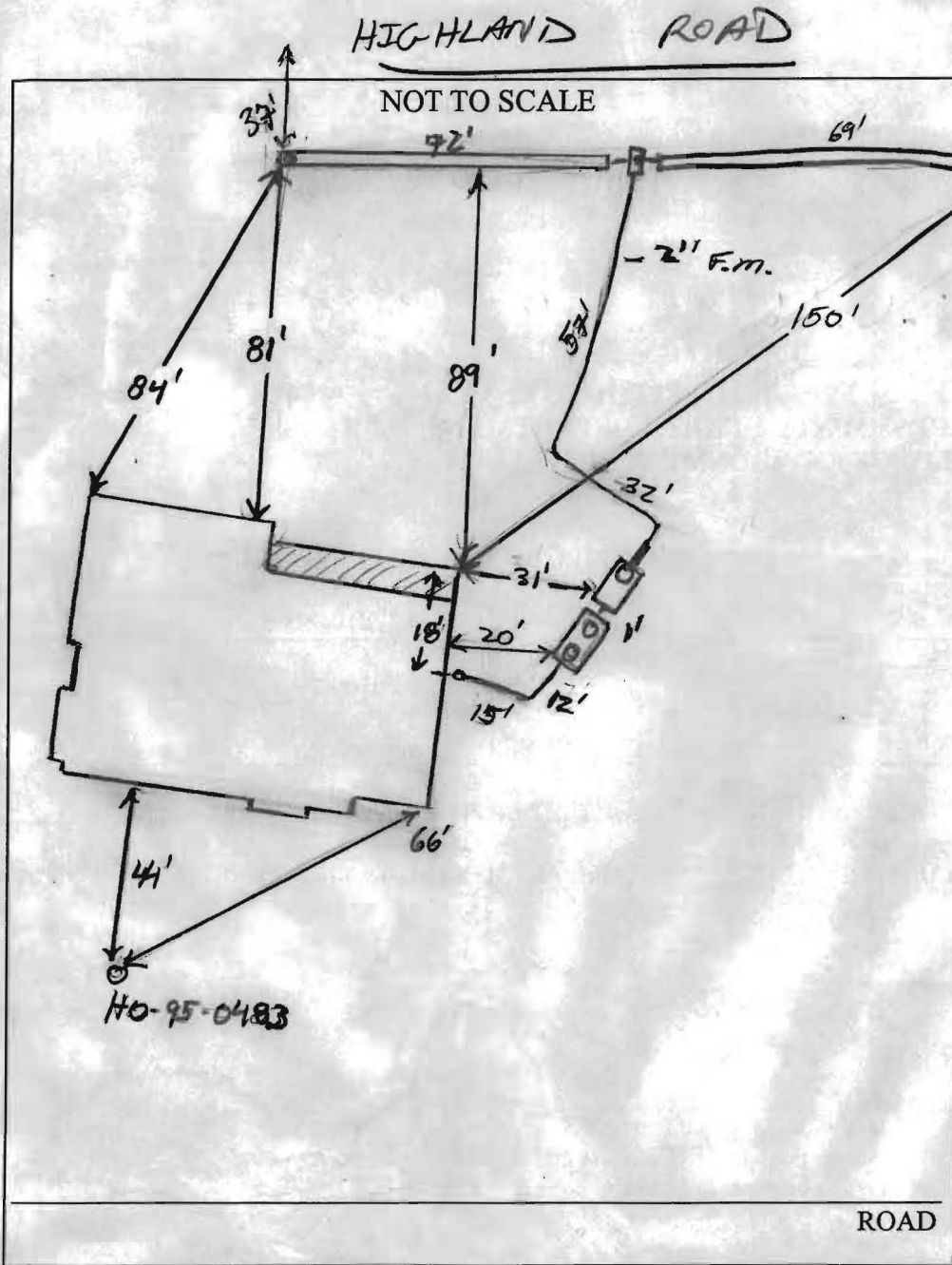
*3' w/ SW @
 2' wide = 158' of
 trench*

TRENCHES:	Trench to be 2.0 feet wide. Inlet 4.0 feet below original grade. Bottom maximum depth 8.0 feet below original grade. Effective area begins at 4.0 feet below original grade. 4.0 feet of stone below distribution pipe.
LOCATION:	
NOTES:	Basement service by gravity. Install system per plan.

PLANS APPROVED: Sara Fegel DATE: 08/03/06

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	4'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		141'
ABSORPTION AREA		282' ± SW
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

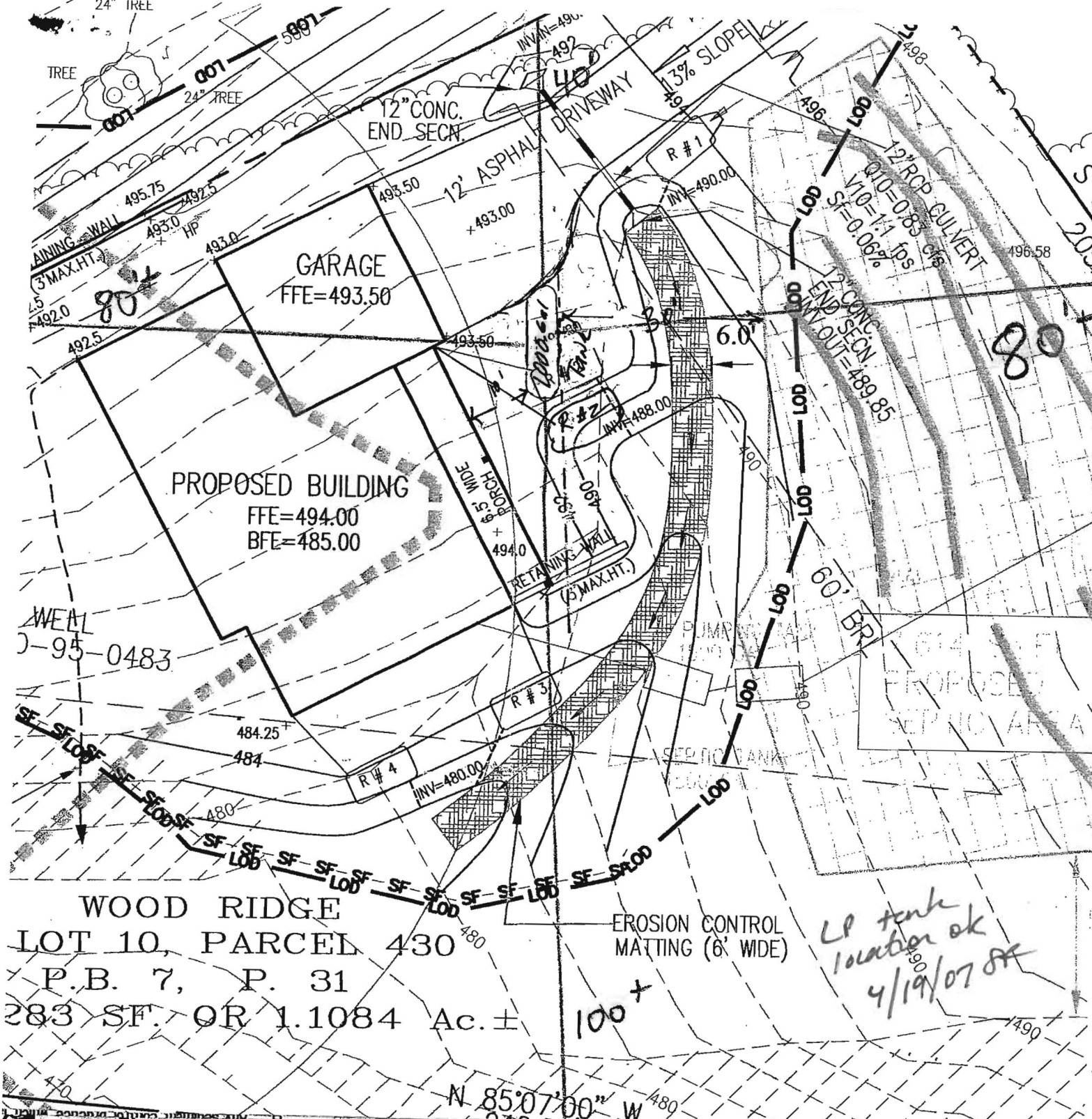
SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
Babylon 2-comp slotted	CAPACITY 1500 GAL
	SEAM LOC Top
	TANK LID DEPTH 3'
	BAFFLES Yes
	BAFFLE FILTER —
	MANHOLE LOC F/R
	6" PORT LOC none
	WATERTIGHT TEST —
SEPTIC TANK 2 LEVEL	Yes
Babylon Pump	CAPACITY 1500 GAL
	SEAM LOC Top
	TANK LID DEPTH 4'
	BAFFLES Yes
	BAFFLE FILTER —
	MANHOLE LOC Rear
	6" PORT LOC none
	WATERTIGHT TEST —

PRE-CONSTRUCTION 4/27/07 System to be installed per plan. Tanks to have transfer bearing lids installed. (KW)

INSTALLATION 5/1/07. System complete. 2" F.M. ran up middle of SRA. Traffic Bearing 2nd of pump tanks. Need P/A test. OK to back fill. (KW)

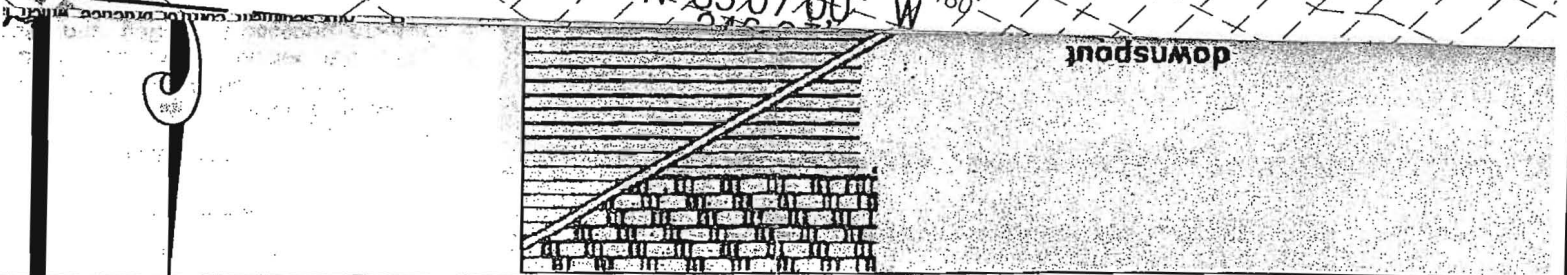
6/18/07 Pump and alarm working (BB)

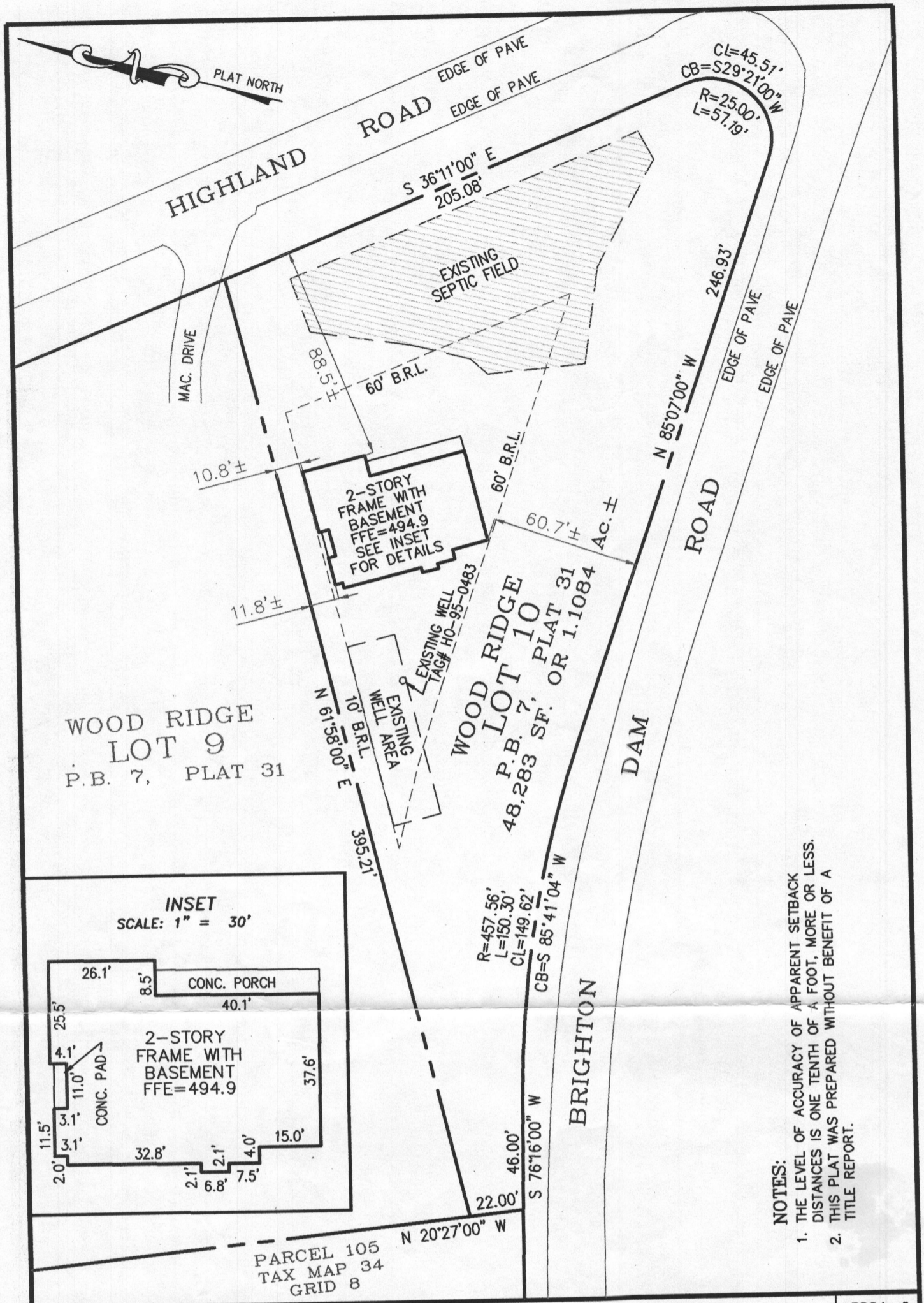
FINAL INSPECTOR B. Baber DATE OF APPROVAL 6/18/07



WOOD RIDGE
 LOT 10, PARCEL 430
 P.B. 7, P. 31
 283 SF. OR 1.1084 Ac. ±

*LP tank
 location ok
 4/19/07 SK*

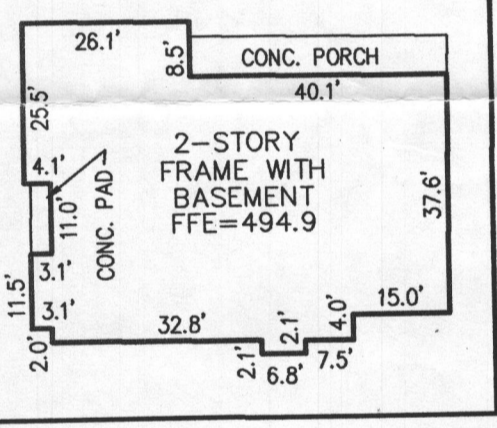




WOOD RIDGE
LOT 9
P.B. 7, PLAT 31

WOOD RIDGE
LOT 10
P.B. 7, PLAT 31
48,283 SF. OR 1.1084 AC. ±

INSET
SCALE: 1" = 30'



- NOTES:
1. THE LEVEL OF ACCURACY OF APPARENT SETBACK DISTANCES IS ONE TENTH OF A FOOT, MORE OR LESS.
 2. THIS PLAT WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.

I HEREBY CERTIFY THAT IMPROVEMENTS ARE LOCATED AS SHOWN HEREON AND TO THE BEST OF MY INFORMATION, PROFESSIONAL KNOWLEDGE AND BELIEF, THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN.

STATE OF MARYLAND
M. N. ROSHAN, L.S.
PROFESSIONAL LAND SURVEYOR
No. 11049
DATE 02/10/07
MD REG. No. 11049

WALL CHECK
LOT 10
WOOD RIDGE
PLAT BOOK 7, PLAT 31
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' DATE: FEB. 09, 2007

PROJ. #
2576

KCE ENGINEERING, INC.

EXECUTIVE CENTER
3300 NORTH RIDGE ROAD, SUITE 315
ELLCOTT CITY, MARYLAND 21043
TEL: (410)203-9800 FAX: (410)203-9228

*wallcheck ok
SF 4/16/07*

*Call
Ron Ricks - 410-627-5038*

SEQUENCE OF CONSTRUCTION

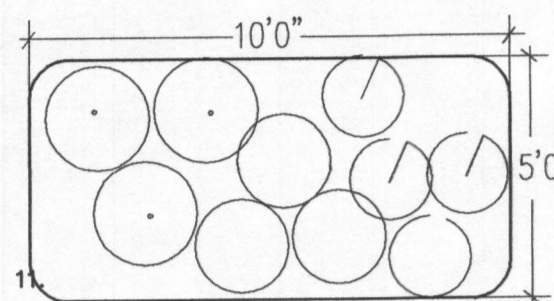
1. Obtain a Grading Permit.
2. Install Stone Construction Entrances.
3. Install the sediment control measures as shown on plan.
4. Perform necessary grading and stabilize the site with topsoil and seeding.
5. After the site is permanently stabilized and permission is granted from the Howard County Sediment Control Inspector, remove sediment controls and stabilize any remaining disturbed areas.

SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	TYPE
ChB2	Chester silt loam, 3 to 8% slopes, moderately eroded	B
GIC2	Glenelg loam, 8 to 15% slopes, moderately eroded	B
MTD2	Manor loam, 15 to 25% slopes, moderately eroded	B

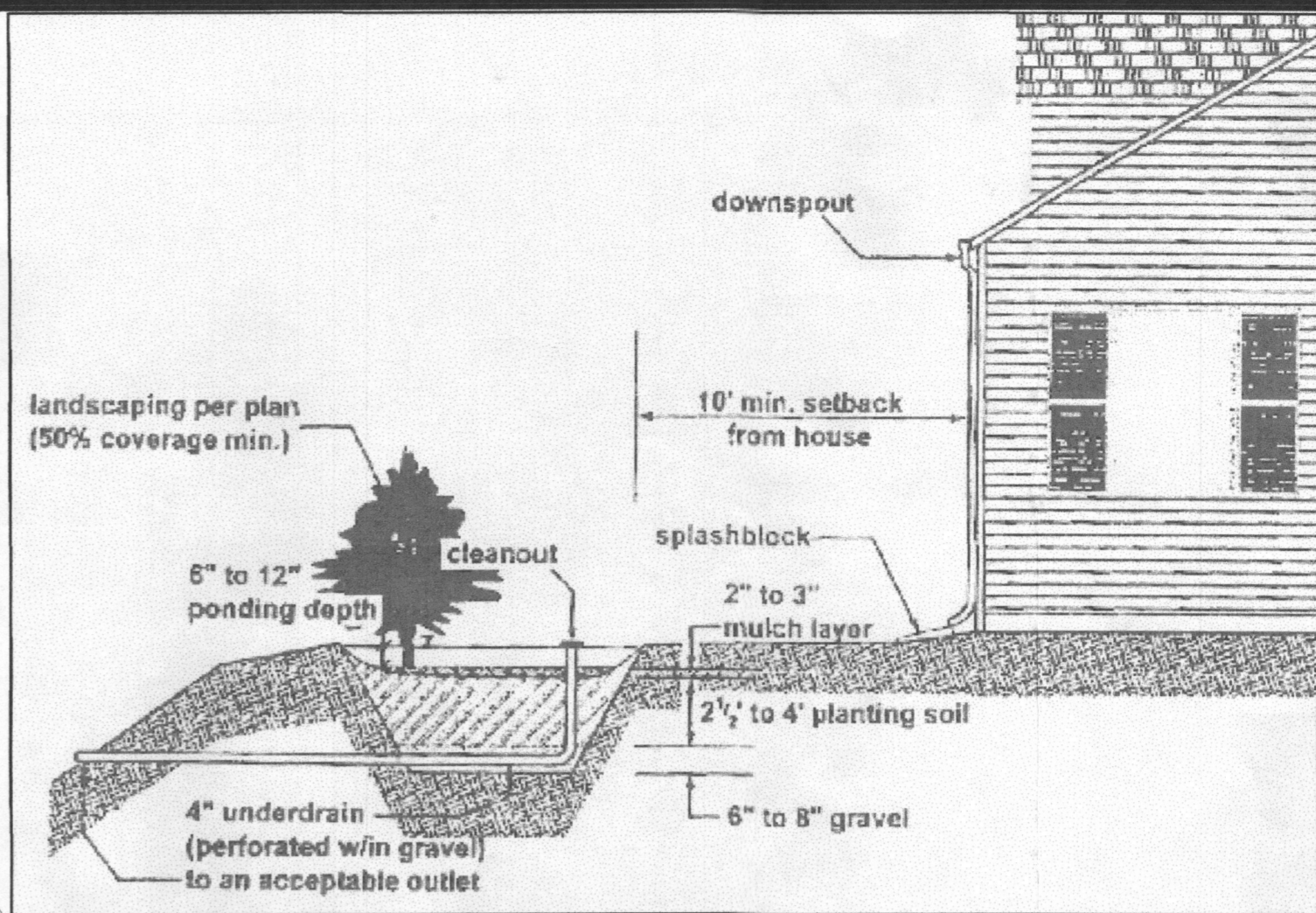
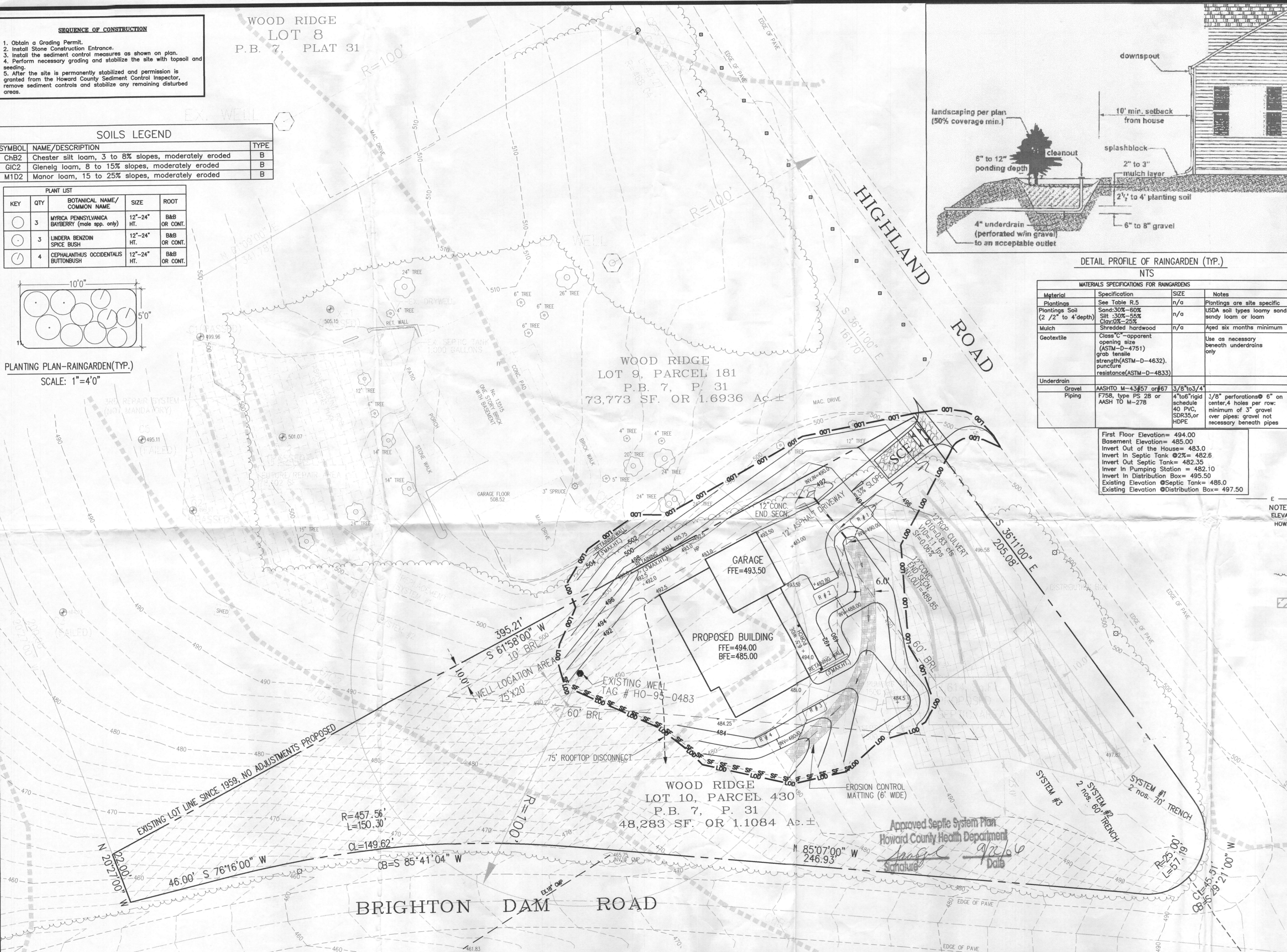
PLANT LIST

KEY	QTY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT
○	3	MYRICA PENNSYLVANICA BAYBERRY (male spp. only)	12"-24" HT.	B&B OR CONT.
○	3	LINDERA BENZONIN SPICE BUSH	12"-24" HT.	B&B OR CONT.
○	4	CEPHALANTHUS OCCIDENTALIS BUTTONBUSH	12"-24" HT.	B&B OR CONT.



PLANTING PLAN-RAINGARDEN(TYP.)

SCALE: 1"=4'0"



DETAIL PROFILE OF RAINGARDEN (TYP.)

NTS

Material	Specification	SIZE	Notes
Plantings	See Table R.5	n/a	Plantings are site specific
Plantings Soil (2 1/2" to 4" depth)	Sand:30%-60% Silt: 30%-56% Clay: 10%-25%	n/a	USDA soil types loamy sand, sandy loam or loam
Mulch	Shredded hardwood	n/a	Aged six months minimum
Geotextile	Class C - apparent opening size (ASTM-D-4751) grab tensile strength(ASTM-D-4632), puncture resistance(ASTM-D-4833)	n/a	Use as necessary beneath underdrains only
Underdrain	Gravel	AASHTO M-43#57 or #67	3/8" to 3/4"
Piping	F785, type PS 28 or AASH TO M-278	4" to 8" rigid schedule 40 PVC, SDR35, or HDPE	3/8" perforations @ 6" on center, 4 holes per row; minimum of 3" gravel over pipes; gravel not necessary beneath pipes

First Floor Elevation= 494.00
 Basement Elevation= 485.00
 Invert Out of the House= 483.0
 Invert in Septic Tank @2% = 482.6
 Invert Out Septic Tank= 482.35
 Invert in Pumping Station = 482.10
 Invert in Distribution Box= 495.50
 Existing Elevation @Septic Tank= 486.0
 Existing Elevation @Distribution Box= 497.50

GENERAL NOTES:

1. This site is zoned RC-DEO per the 10-18-93 Comprehensive Zoning Plan.
 2. BRL denotes Building Restriction Line.
 3. Driveway shall be provided per the following minimum requirements:
 - a. Width-12' (14' serving more than one residence);
 - b. Surface-6" of compacted crusher run base w/tar and chip coating (1-3/4" min.);
 - c. Geometry-max. 15% grade, max. 10% grade change and min. 45' turning radius;
 - d. Structures (culverts/bridges)-capable of supporting 25 gross tons (H25 loading);
 - e. Drainage Elements-capable of safely passing 100-year flood with no more than 1 foot depth over driveway surface;
 - f. Maintenance-sufficient to insure all weather use.
 4. Topography shown here is based on field run topo performed by KCE Engineering, Inc. in November, 2005.
 5. Boundary survey was performed by KCE Engineering, Inc. in November, 2005.
 6. The zoning of the property and lot lines will remain as documented on the final record plat dated June, 1959.
 7. The drilled proposed well site will have great surpassing the minimum state requirement per the Approving Authority's discretion.
 8. The perc performed on Lot 9 was not required, but was done due to concern about future performance of the existing septic system.
 9. All existing wells and septic within 100' of property have been shown.
 10. Ex. septic system for Lot 9 was inspected on January 30th, 2006 and approved for continued use by the APPROVING AUTHORITY.
 11. The lots shown herein comply with the minimum lot area and ownership width as required by Maryland State Department of the Environment.
- THIS AREA DESIGNATES A PRIVATE EASEMENT AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS WILL BECOME NULL AND VOID UPON CONNECTION OF PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
12. THE EXISTING WELL TAG # HO-95-0483 HAS BEEN FIELD LOCATED BY KCE ENGINEERING AND IS ACCURATELY SHOWN.

LEGEND

- POWER POLE
- × GUY ANCHOR
- ROAD SIGN
- OVERHEAD WIRE
- NOTE: ELEVATIONS SHOWN HEREON ARE TIED TO HOWARD COUNTY NGVD 29 DATUM.
- PROPOSED LOCATION OF PERC HOLES
- IPF DENOTES IRON PIPE FOUND
- EX.TREE LINE
- EX.WELL LOCATION
- STEEP SLOPE (MORE THAN 25%)
- PROPOSED CONTOUR
- EXISTING CONTOUR
- SILT FENCE
- LIMIT OF DISTURBANCE
- PROPOSED LOCATION OF PERC HOLES
- IPF DENOTES IRON PIPE FOUND
- EX.TREE LINE
- EX.WELL LOCATION
- STEEP SLOPE (MORE THAN 25%)
- PROPOSED CONTOUR
- EXISTING CONTOUR
- SILT FENCE
- LIMIT OF DISTURBANCE
- STABILIZATION CONSTRUCTION ENTRANCE (SCE) W/MOUNTABLE BERM
- EROSION CONTROL MATTING
- PROPOSED 12" CMP CULVERT
- RAIN GARDEN (TYP.)

STANDARD SEDIMENT CONTROL NOTES:

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most recent 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within:
 - a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes steeper than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec.51), and (Sec. 54), temporary seeding (Sec. 50), and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area of Site	= 1.11 Acres	= 48,294 sft.
Area Disturbed	= 0.41 Acres	= 17,732sft.
Area to be roofed or paved	= 0.11 Acres	= 4712 sft.
Area to be vegetatively stabilized	= 0.3 Acres	= 13068 sft.
Total Cut	= 271 Cu.Yds.	
Total Fill	= 108 Cu.Yds.	

Offsite waste/borrow area location: EXCESS MATERIALS TO BE REMOVED TO SITE WITH APPROVED SEDIMENT CONTROL SITE.
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
12. Planting in Raingardens shall cover at least 50% of the surface area of the Raingarden. Roof leaders shall be oriented towards raingardens.

KCE ENGINEERING, INC.
 EXECUTIVE CENTER
 3300 NORTH RIDGE ROAD, SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 PHONE (410) 203-9800 FAX (410) 203-9228



OWNER/DEVELOPER
 PETER BONNETT
 13515 HIGHLAND ROAD
 CLARKVILLE, MD-21029

ENGINEER'S CERTIFICATE
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer: *Peter Bonnett* Date: 9/18/06
 DHARAM V. KATHURIA
 Print name of Engineer

DEVELOPER'S CERTIFICATE
 I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
 Signature of Developer: *Peter Bonnett* Date: _____
 (PETER BONNETT)

Reviewed for HOWARD SCD and meets Technical Requirements.
 USA-Natural Resources Conservation Service Date: _____
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD Date: _____

PLOT PLAN
 PETER BONNETT PROPERTY
 PARCELS 181, 430, TAX MAP 34, GRID 8
 LIBER 6496, FOLIO 417
 WOOD RIDGE, HOWARD COUNTY, MARYLAND

SCALE: 1" = 20' JOB NO.: 05110.00 DATE : SEP 18, 2006 SHEET : 1 OF 1